



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

February 8, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:05

Reporting for the week ending 02/02/13 (MMWR Week #05)

CURRENT HOMELAND SECURITY THREAT LEVELS

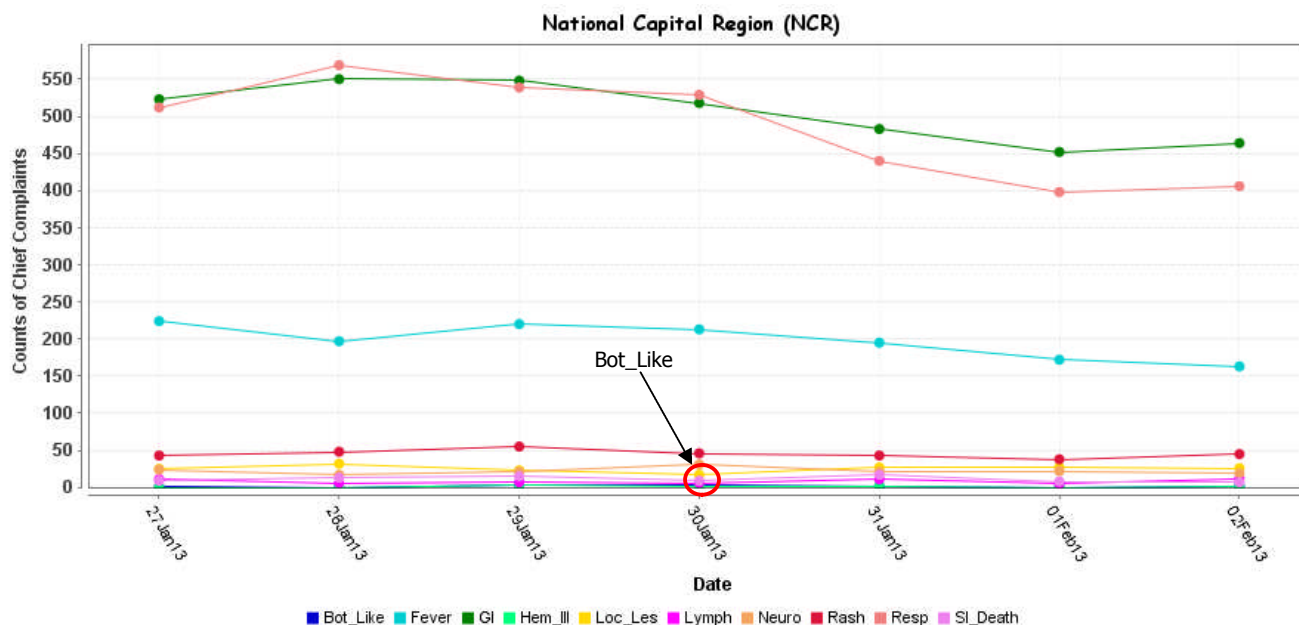
National: No Active Alerts
Maryland: Level One (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

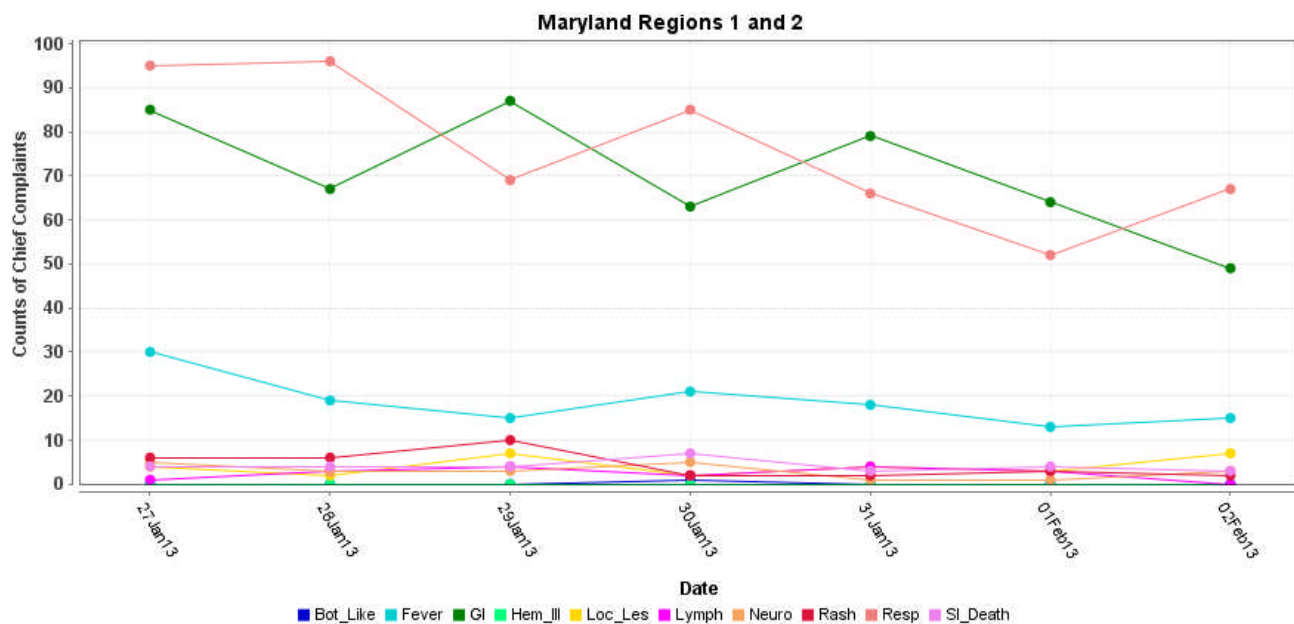
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

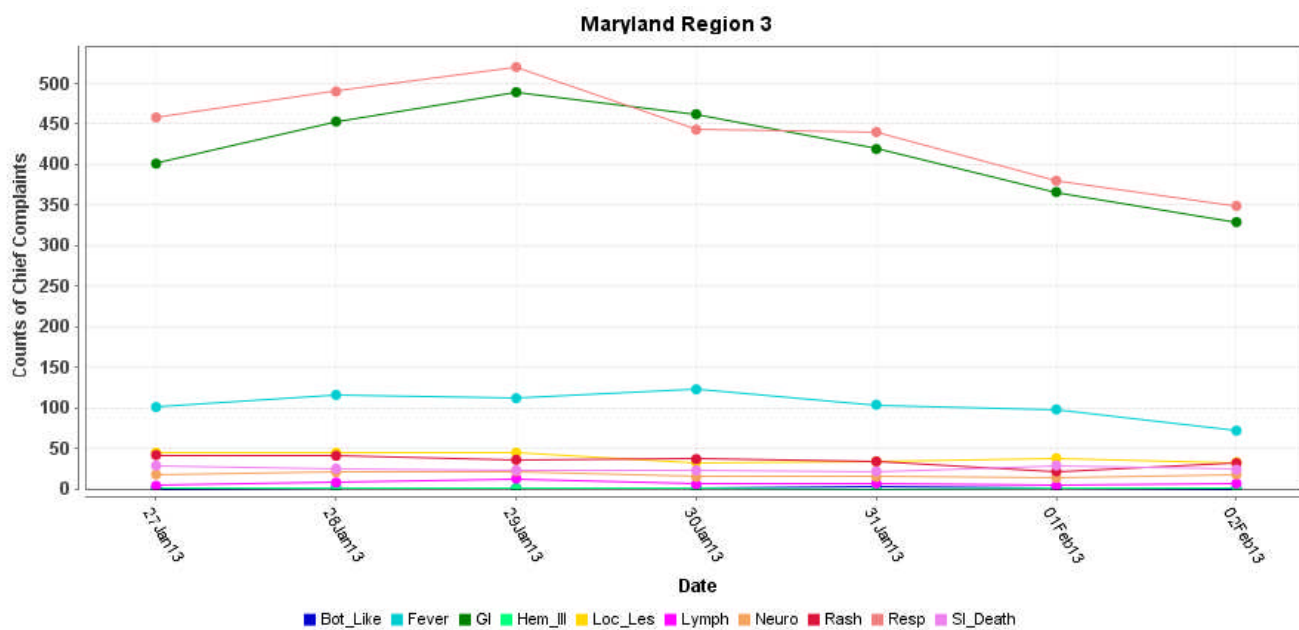


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

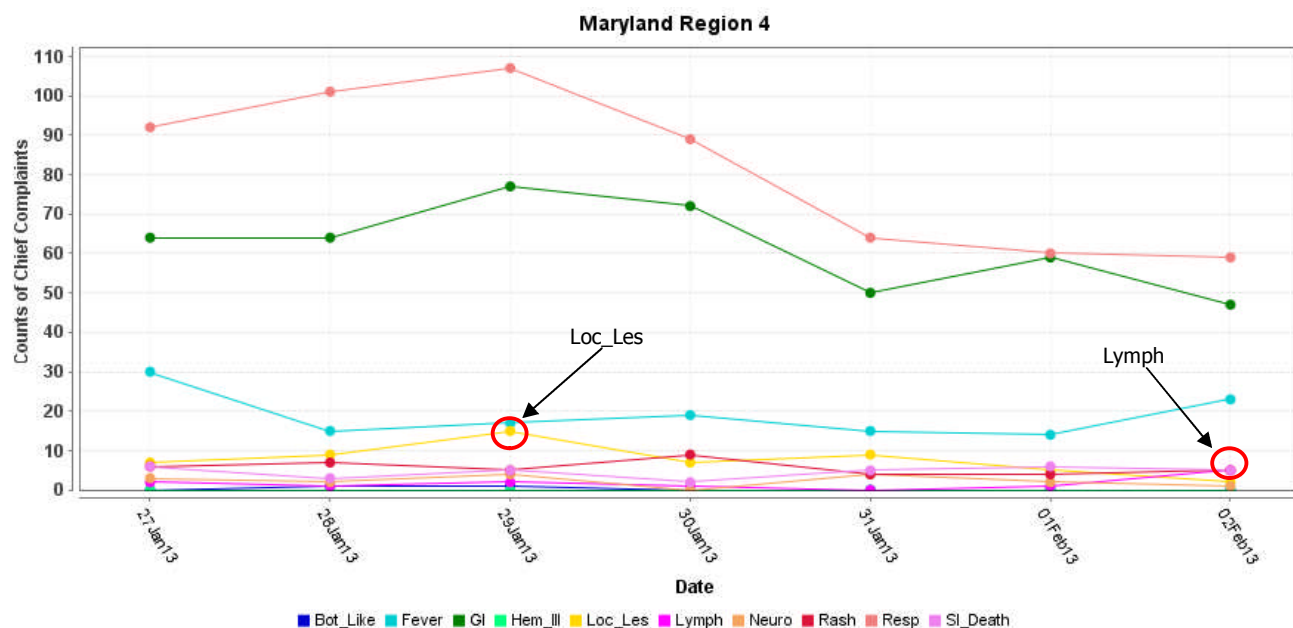
MARYLAND ESSENCE:



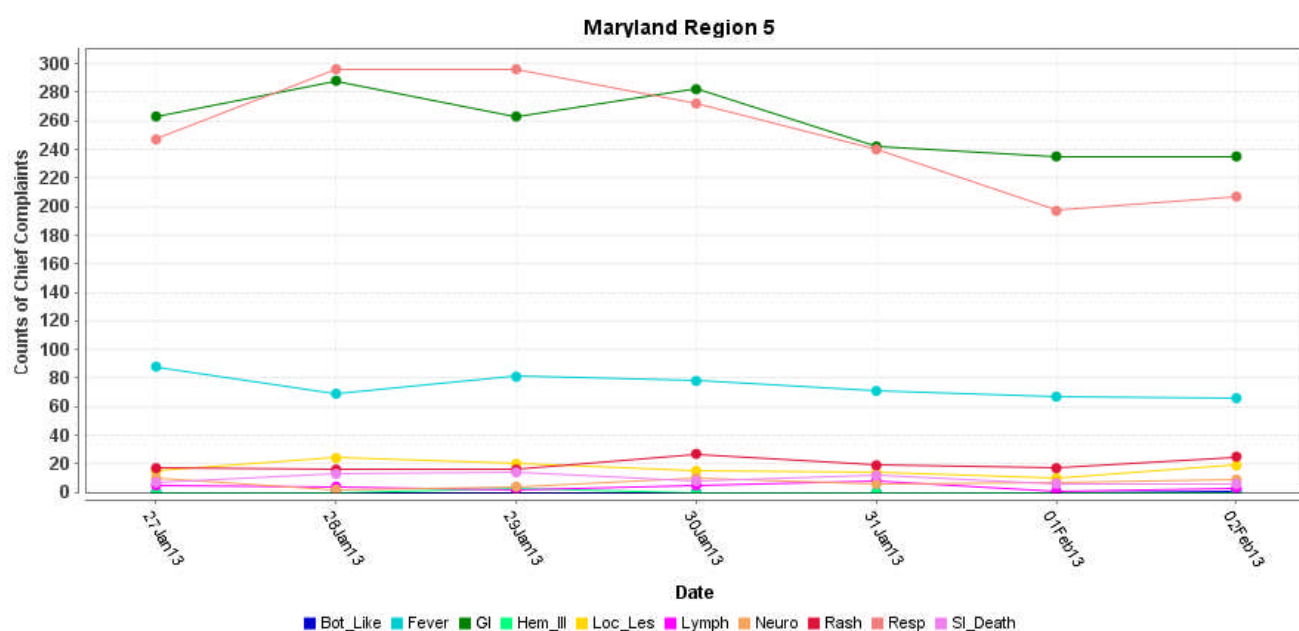
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

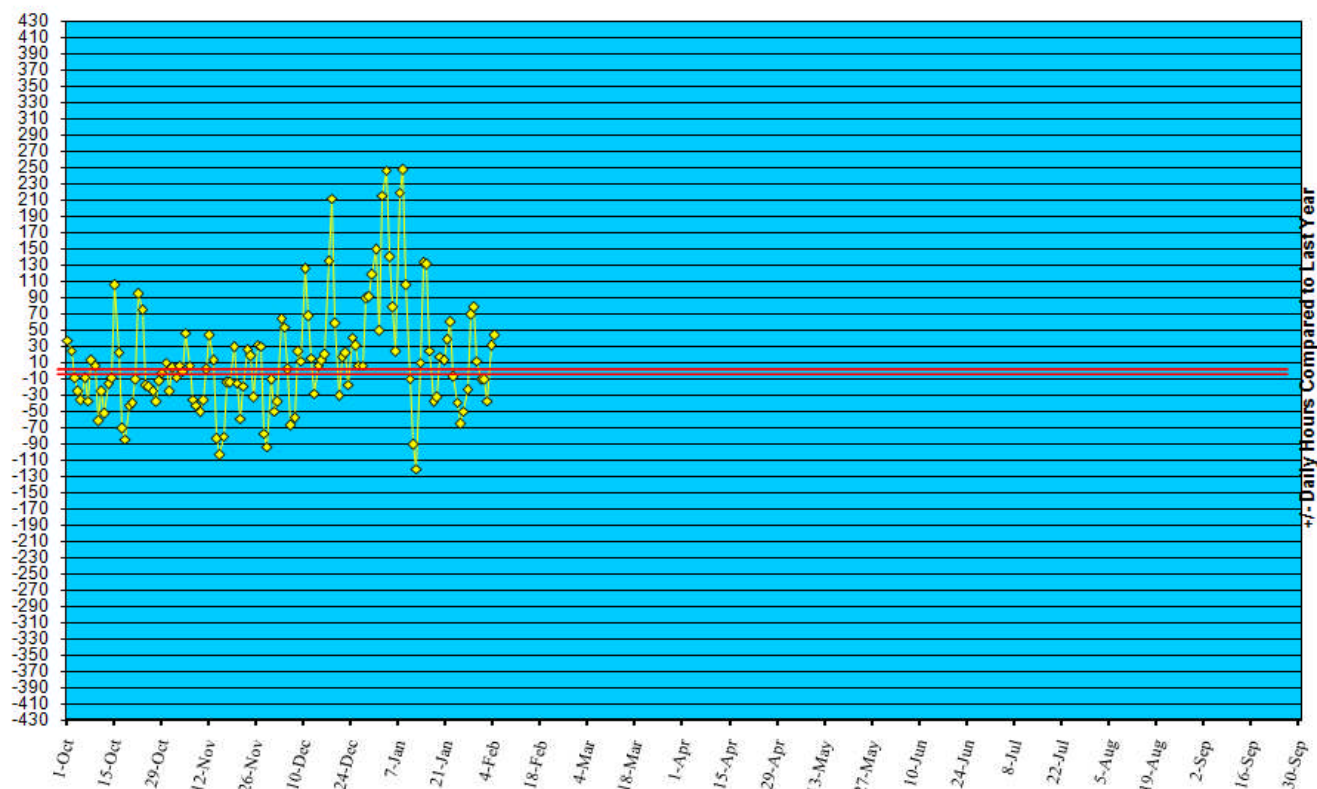


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '12 to February 2, '13



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:

New cases (January 27 –February 2, 2013):

Aseptic

14

Meningococcal

0

Prior week (January 20 –January 26, 2013):

8

0

Week#5, 2012 (January 29 – February 4, 2012):

1

0

17 outbreaks were reported to DHMH during MMWR Week 5 (January 27-February 2, 2013)

6 Gastroenteritis Outbreaks

- 1 outbreak of GASTROENTERITIS in a Nursing Home
- 4 outbreaks of GASTROENTERITIS in an Assisted Living Facilities
- 1 outbreak of GASTROENTERITIS in a Day Care Center

2 Foodborne outbreaks

- 1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Banquet Hall
- 1 outbreak of SCOMBROID POISONING associated with a Food Store

8 Respiratory illness outbreaks

- 1 outbreak of INFLUENZA in a Hospital
- 2 outbreaks of INFLUENZA in Nursing Homes
- 1 outbreak of INFLUENZA in an Assisted Living Facility
- 2 outbreaks of INFLUENZA/PNEUMONIA in Assisted Living Facilities
- 1 outbreak of ILI in a Nursing Home
- 1 outbreak of RSV in a Residential Facility

1 Rash illness outbreak

- 1 outbreak of SCABIES in an Assisted Living Facility

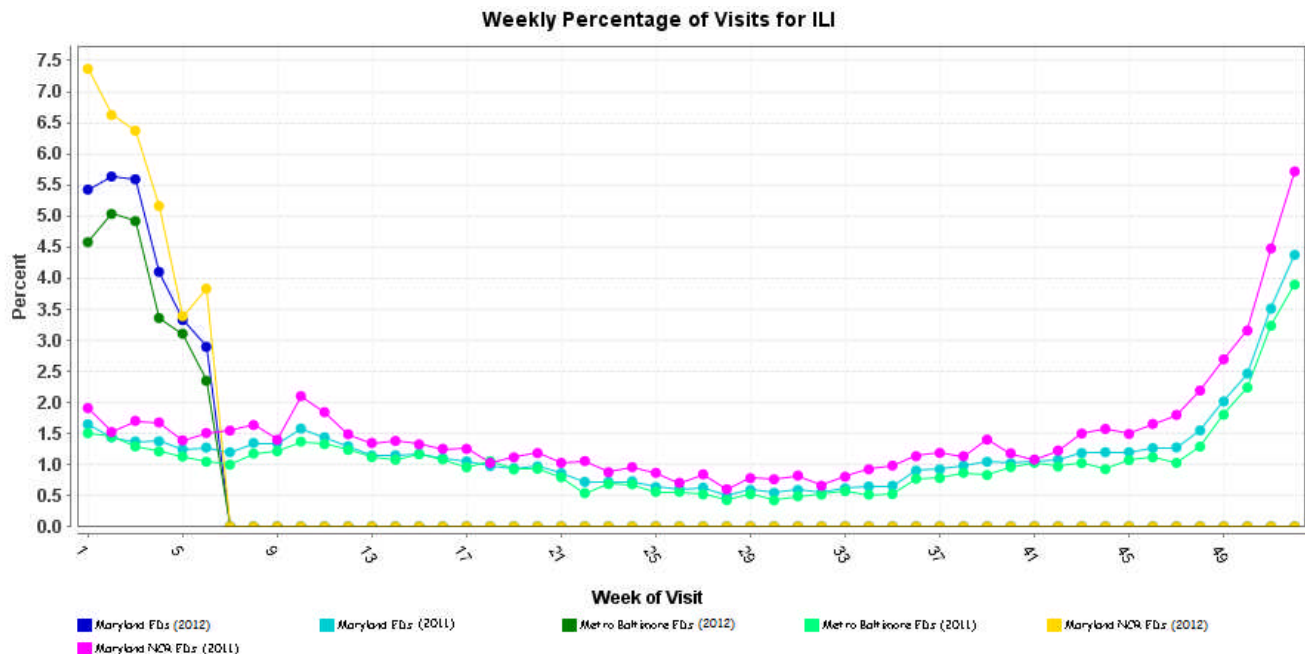
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 5 was: Widespread Activity with Low Intensity.

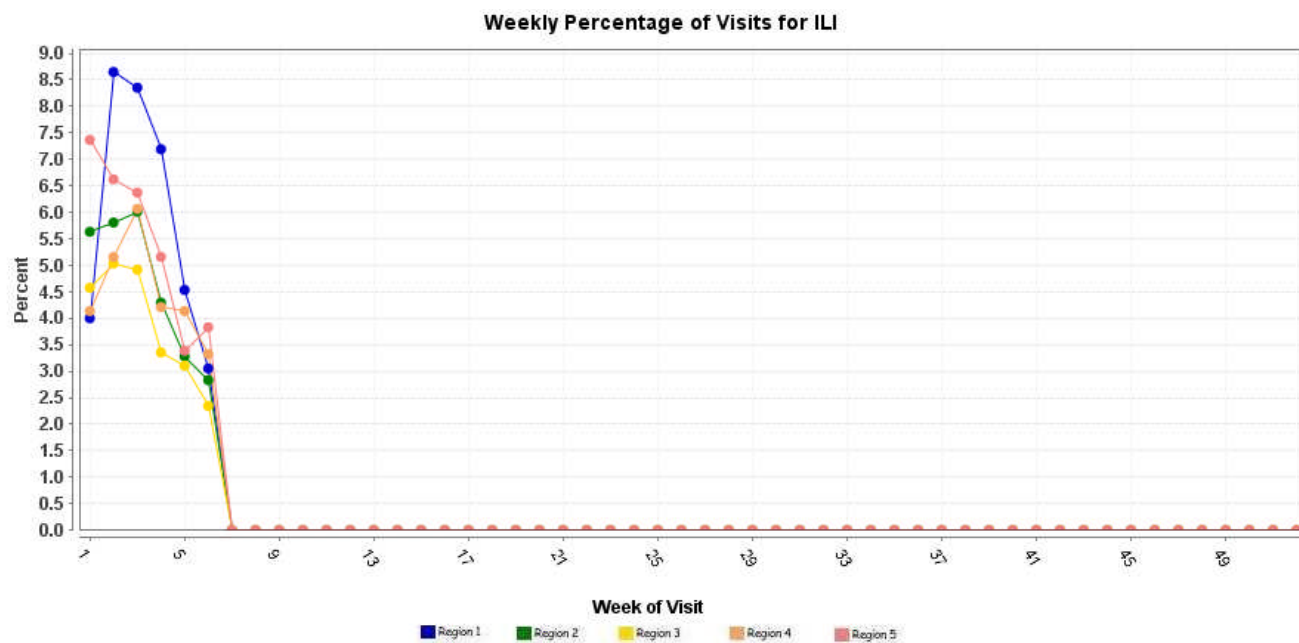
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.

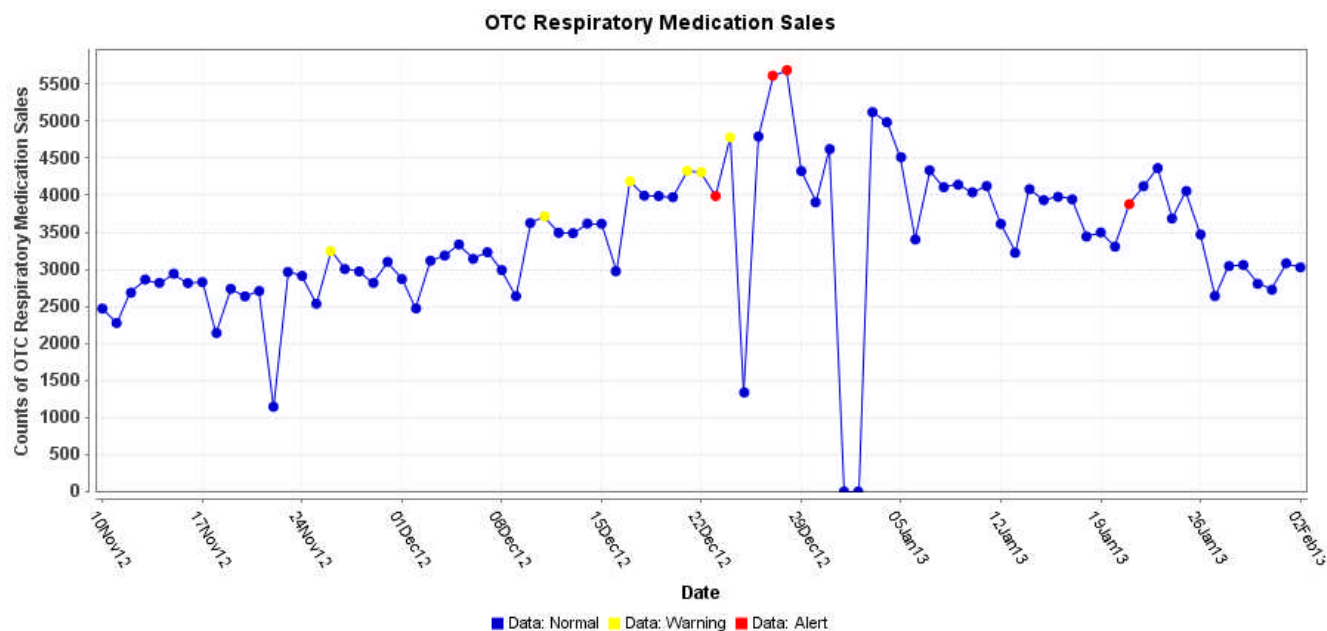


* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. As of February 1, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 615, of which 364 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (CAMBODIA): 1 February 2013, The Ministry of Health (MoH) of the Kingdom of Cambodia reported 5 new human cases of avian influenza that were confirmed positive for the H5N1 virus in January 2013. Case details include an 8-month-old male from Phnom Penh with onset 9 Jan 2013, a 17-year-old female from Takeo Province with onset 11 Jan 2013, a 35-year-old male from Kong Pisey district, Kampong Speu Province, with onset 13 Jan 2013, a 17-month-old female from Kong Pisey district, Kampong Speu Province, with onset 13 Jan 2014, and a 9-year-old female from Toeuk Chhou district, Kampot Province, with onset on 15 Jan 2013. The cases all presented with fever, cough and other ILI [influenza-like illness] symptoms. 4 of the cases died, with one case, the 8-month-old male, recovering after only experiencing mild ILI. Laboratory samples were tested by the National Institute of Public Health's laboratory and by the Institut Pasteur du Cambodge. Preliminary evidence does not support human-to-human transmission and 4 of the cases are known to have had close contact with sick/dead poultry. The Ministry of Health's Rapid Response Teams (RRT) have gone to the hospitals and the field to identify the patients' close contacts, any epidemiological linkage among the 5 cases and initiate preventive treatment as required. In addition, public health education campaigns are being conducted in the villages to inform families on how to protect themselves from contracting avian influenza. The teams are checking records for evidence of increased ILI activity in the local health centres or any increase in number of SARI [Severe Acute Respiratory Infection] cases from the affected areas. Results from testing of those who have ILI symptoms among close contacts for A/H5N1 influenza to date were negative. There is enhanced surveillance for ILI and SARI in local health centre and hospital for a further 2 weeks. Health education messages have been distributed to the community. The World Health Organization is actively assisting the Ministry of Health in their investigations.

NATIONAL DISEASE REPORTS*

SALMONELLOSIS (USA): 31 January 2013, A total of 20 people infected with the outbreak strain of *Salmonella Typhimurium* have been reported from 8 states. Since the last update, 4 cases have been reported from Illinois (1), Ohio (1), Minnesota (1), and Washington (1). Among those who reported the date they became ill, illnesses began between 26 Dec 2011 and 31 Dec 2012. Cases range in age from less than 1 year to 91 years [median 13 years]. 45 per cent of cases are 10 years of age or younger and 55 per cent are female. Four of the 13 cases with available information (31 per cent) have been hospitalized. 1 death associated has been reported in Washington State. Illnesses that occurred after 4 Jan 2013 might not be reported yet due to the time it takes between when a person becomes ill and when the illness is reported. In interviews, cases answered questions about contact with animals and foods consumed during the week before becoming ill. 14 of 15 (93 per cent) interviewed reported contact with hedgehogs or their environments before becoming ill. Some specifically mentioned contact with African Pygmy hedgehogs. Investigations are ongoing to determine the type and source of hedgehogs that might be linked with illness. Cases with available purchase information reported buying pet hedgehogs from multiple breeders in several states. The United States Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS) Animal Care is currently conducting traceback investigations of hedgehogs purchased from USDA-licensed breeders linked to cases. In addition, state health departments have tested environmental and hedgehog samples collected from the homes of cases. The outbreak strain of *S. Typhimurium* was isolated from a Minnesota environmental sample of a container and sink in which a pet hedgehog was bathed. The outbreak strain was also isolated from a 2nd hedgehog purchased after the 1st hedgehog and case-patient in Minnesota became ill. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

BOTULISM (NAMBIA): 29 January 2013, A total of 6 people in Armenia's Ararat Region was hospitalized due to food poisoning. [According to the] result of the diagnostic analysis, they were poisoned by botulism in canned vegetables prepared at home. After consuming the [vegetables], [the people showed] signs of botulism, including weakness, headache, and difficulties with swallowing. Another case of poisoning was registered in Artsakh [Nagorno-Karabakh] with a fatal end. A 65 year old resident of Saratak village [Shirak province] consumed canned red pepper on 17 Jan 2013 and on the next day he felt weak and was hospitalized. His health deteriorated, however, and he was transferred to Yerevan on 25 Jan 2013, where he died the following day. Armenian Ministry of Healthcare again warns the citizens to avoid consuming canned food prepared at home. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (CANADA): 28 January 2013, Health officials from BC [British Columbia province] and Yukon are in Atlin, BC, today looking for the source of a deadly case of [a] hantavirus [infection]. The rare disease is normally spread through the urine and feces from deer mice (*Peromyscus maniculatus*). Officials confirmed the virus was responsible for the death of a 45-year-old man earlier this month [January 2013]. He died suddenly 9 Jan [2013] at the Whitehorse hospital. Doctor Ronald Chapman, the Chief Medical Health officer for northern BC, said the Atlin death is the most northerly case of [a] hantavirus [infection] ever diagnosed in the province. "Up until 1995, the farthest north the virus occurred in BC is up to Williams Lake, so this is certainly the farthest north." Health officials advise people to wear gloves and masks when working around or cleaning out areas where there may be mice. The hantavirus infection, also known as hantavirus pulmonary syndrome (HPS), is a very rare viral disease which can be fatal. Early symptoms of hantavirus infection include fever and muscle aches, possibly with chills, headache, nausea, vomiting, diarrhea, abdominal pain, and cough, which progresses to respiratory illness, the province said in a release. The symptoms develop within 1-6 weeks after exposure to [virus contaminated] deer

mouse droppings. Chapman said investigators in Atlin hope to find the source of the virus by trapping the diseased rodents. He said it's usually just one or 2 infected mice that are responsible. Chapman said there is no cause for public concern at this point. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from <http://www.promedmail.org/>.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website:
<http://preparedness.dhmmh.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmmh.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable

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**DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION**

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